UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,600	02/02/2000	Hang Zhang	50325-109	6479

7590 09/27/2002

Christopher J Palermo
McDermott Will & Emery
600 13th Street NW
Washington, DC 20005-3096

EXAMINER
BOUTAH, ALINA A

ART UNIT	PAPER NUMBER
2158	

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/496,600	ZHANG ET AL.	
	Examiner	Art Unit	
	Alina N Boutah	2158	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 February 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 202 on page 12, lines 24-25, and 818 on page 19, line 18. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4, 7-4, 17-20, 23, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,389, 464 issued to Krishnamurthy et al.

Regarding claim 1, Krishnamurthy et al. teach a method for obtaining a current value of a Management Information Base (MIB) variable stored in a network device in a network, the method comprising the steps of:

receiving a connection of a Web browser to the network device (column 7, lines 54-65);

receiving an HTTP request message from the browser to obtain the current value of the MIB variable (column 8, lines 62 – column 9, lines 1-54);

receiving the current value of the MIB variable from the MIB of the network device (column 7, lines 66-67 – column 8 lines 1-15); and

communicating the current value of the MIB variable to the browser using an HTTP reply message (column 10, lines 48-54; figures 25-27).

Regarding claim 2, Krishnamurthy et al. teach the method of claim 1, further comprising the steps of:

creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57);

creating an electronic document that contains a representation of one or more MIB variables of the MIB object tree (figures 25-27);

communicating the electronic document to the Web browser (figures 25-27).

Regarding claim 3, Krishnamurthy et al. teach the method of claim 1, wherein the step of receiving the current value of the MIB variable from the MIB of the network device includes the steps of creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57); obtaining the MIB variable from the MIB object tree in the memory of the network device (column 10, lines 63-67 – column 11, lines 1-8).

Regarding claim 4, Krishnamurthy et al. teach the method of claim 1, further comprising the steps of:

creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57);

creating an electronic document that contains a representation of one or more MIB variables of the MIB object tree (figures 25-27);

receiving a user selection of one of the MIB variables based on the electronic document (102 figure 4; figures 25-27; column 7, lines 54-65);

wherein the step of receiving the current value of the MIB variable from the MIB of the network device includes the step of obtaining the MIB variable that is identified in the user selection from the MIB object tree in the memory of the network device (figures 25-26).

Regarding claim 7, Krishnamurthy et al. teach the method of claim 1, further comprising the step of creating and storing an executable software element in association with the Web browser, wherein the executable software element is configured for packaging an SNMP query into the request from the Web browser (column 2, lines 24-55, column 8, lines 24-47).

Regarding claim 8, although Krishnamurthy et al. do not explicitly disclose the method of claim 1, wherein the step of receiving a request from the Web browser to obtain the current value of the MIB variable includes the step of unpackaging an SNMP query that is packaged in the request from the Web browser to identify the MIB variable, by the principle of inherency, in order for obtain the current value of the MIB, the SNMP request must be packaged and unpackaged at the web browser.

Regarding claim 9, Krishnamurthy et al. teach the method of claim 8, further comprising the step of sending the SNMP query to an SNMP daemon of the network device (column 7, lines 66-67 – column 8 lines 1-15; column 8, lines 62 – column 9, lines 1-54).

Regarding claim 10, although Krishnamurthy et al. do not explicitly disclose the method of claim 8, wherein the step of returning the current value of the MIB variable to the Web browser includes the step of repackaging the current value of the MIB variable into an HTTP reply message, by the principle of inherency, in order for the web browser to receive the current value of the MIB, it must be repackaged in the reply message.

Regarding claim 11, Krishnamurthy et al. teach a network device, comprising:

a processor (column 19 line 63);

a Management Information Base (MIB) logically accessible by the processor and comprising one or more stored values of MIB variables (column 19, lines 63-67 – column 20, lines 1-8);

a Simple Network Management Protocol (SNMP) daemon executed by the processor (column 2, lines 24-55);

a Hypertext Transfer Protocol (HTTP) daemon executed by the processor (column 7, lines 54-65);

stored instructions for obtaining a current value of a Management Information Base (MIB) variable stored in the network device which, when executed by the processor, cause the processor to carry out the steps of:

receiving a connection of a Web browser at the HTTP daemon (column 7, lines 54-65);

receiving an HTTP request message from the browser to obtain the current value of one of the MIB variables (column 8, lines 54-56);

receiving the current value of the MIB variable from the MIB of the network device using the SNMP daemon (column 7, lines 66-67 – column 8 lines 1-15; column 8, lines 62 – column 9, lines 1-54); and

communicating the current value of the MIB variable to the browser using an HTTP reply message (column 10, lines 48-54; figures 25-27).

Regarding claim 12, Krishnamurthy et al. teach the network device of claim 11, wherein the instructions further cause the processor to carry out the steps of:

creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57);

creating an electronic document that contains a representation of one or more MIB variables of the MIB object tree (figures 25-27);

communicating the electronic document to the Web browser (figures 25-27).

Regarding claim 13, Krishnamurthy et al. teach the network device of claim 11, wherein the step of receiving the current value of the MIB variable from the MIB of the network device includes the steps of creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57); obtaining the MIB variable from the MIB object tree in the memory of the network device (column 10, lines 63-67 – column 11, lines 1-8).

Regarding claim 14, Krishnamurthy et al. teach the network device of claim 11, wherein the instructions further cause the processor to carry out the steps of:

creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57);

creating an electronic document that contains a representation of one or more MIB variables of the MIB object tree (figures 25-27);

receiving a user selection of one of the MIB variables based on the electronic document (102 figure 4; figures 25-27; column 7, lines 54-65);

wherein the step of receiving the current value of the MIB variable from the MIB of the network device includes the step of obtaining the MIB variable that is identified in the user selection from the MIB object tree in the memory of the network device (figures 25-26).

Regarding claim 17, Krishnamurthy et al. teach a computer-readable medium carrying one or more sequences of one or more instructions for obtaining a current value of a Management Information Base (MIB) variable stored in a network device in a network, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

receiving a connection of a Web browser to the network device (column 7, lines 54-65);

receiving an HTTP request message from the browser to obtain the current value of the MIB variable (column 8, lines 62 – column 9, lines 1-54);

receiving the current value of the MIB variable from the MIB of the network device (column 7, lines 66-67 – column 8 lines 1-15); and

communicating the current value of the MIB variable to the browser using an HTTP reply message (column 10, lines 48-54; figures 25-27).

Regarding claim 18, Krishnamurthy et al. teach the computer-readable medium as recited in claim 17, wherein the instructions further cause the processor to carry out the steps of creating and storing a MIB object tree (column 19, lines 48-54; column 20, lines 49-57);

creating an electronic document that contains a representation of one or more MIB variables of the MIB object tree (figures 25-27);

communicating the electronic document to the Web browser (figures 25-27).

Regarding claim 19, Krishnamurthy et al. teach the computer-readable medium as recited in claim 17, wherein receiving the current value of the MIB variable from the MIB of the network device includes the steps of creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57); obtaining the MIB variable from the MIB object tree in the memory of the network device (column 10, lines 63-67 – column 11, lines 1-8).

Regarding claim 20, Krishnamurthy et al. teach the computer-readable medium as recited in claim 17, wherein the instructions further cause the processor to carry out the steps of:

creating and storing a MIB object tree in a memory of the network device (column 19, lines 48-54; column 20, lines 49-57);

creating an electronic document that contains a representation of one or more MIB variables of the MIB object tree (figures 25-27);

receiving a user selection of one of the MIB variables based on the electronic document (102 figure 4; figures 25-27; column 7, lines 54-65);

wherein receiving the current value of the MIB variable from the MIB of the network device includes the step of obtaining the MIB variable that is identified in the user selection from the MIB object tree in the memory of the network device (figures 25-26).

Regarding claim 23, Krishnamurthy et al. teach an HTTP browser program including a plug-in executable software element configured for obtaining a current value of a Management Information Base (MIB) variable stored in a network device in a network and which, when executed by a processor that executes the browser, causes the processor to carry out the steps of connecting the browser to the network device;

communicating an HTTP request message from the browser to the network device, wherein the HTTP request message comprises an SNMP query that requests a current value of the MIB variable (column 8, lines 62 – column 9, lines 1-54);

receiving the current value of the MIB variable from the MIB of the network device in an HTTP reply message (column 7, lines 66-67 – column 8 lines 1-15); and

displaying the current value of the MIB variable using the browser (column 10, lines 48-54; figures 25-27).

Regarding claim 24, Krishnamurthy et al. teach an applet executable in a browser program and configured for obtaining a current value of a Management Information Base (MIB) variable stored in a network device in a network and which, when executed by the browser, causes the browser to carry out the steps of:

connecting the browser to the network device (column 7, lines 54-65);

communicating an HTTP request message from the browser to the network device, wherein the HTTP request message comprises an SNMP query that requests a current value of the MIB variable (column 8, lines 62 – column 9, lines 1-54);

receiving the current value of the MIB variable from the MIB of the network device in an HTTP reply message (column 7, lines 66-67 – column 8 lines 1-15); and

displaying the current value of the MIB variable using the browser (column 10, lines 48-54; figures 25-27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 6, 15, 16, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnamurthy et al. in view of USPN 6,008,805 issued to Land et al.

Regarding claim 5, Krishnamurthy et al. teach the method for obtaining a current value of MIB variable stored in a network device in a network, the method further comprising the steps of creating an SNMP query that requests a current value of the MIB variable based on the HTTP request message (column 7, lines 54-65; column 8, lines 62-67 – column 9, lines 1-8); and communicating the SNMP query to an SNMP daemon of the network device (column 7, lines 66-67 – column 8 lines 1-15; column 8, lines 62 – column 9, lines 1-54).

However, Krishnamurthy et al. fail to teach the step of of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface. Land et al. teach the step of of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface (column 7, lines 5-60).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable the step of of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface in order to provide a management interface that is easily modified, enhanced, and customized for specific applications (column 4, lines 13-15, 22-29).

Regarding claim 6, Krishnamurthy et al. fail to teach the method for obtaining a current value of MIB variable stored in a network device in a network, further comprising the steps of: communicating the current value of the MIB variable to the HTTP-SNMP interface; creating and storing an HTML page that contains the current value of the MIB variable; and sending the HTML page to an HTML daemon of the network device.

Land et al. teach the method for obtaining a current value of MIB variable stored in a network device in a network, further comprising the steps of: communicating the current value of the MIB variable to the HTTP-SNMP interface (column 7, lines 48-58); creating and storing an HTML page that contains the current value of the MIB variable (column 7, lines 59-67); and sending the HTML page to an HTML daemon of the network device (column 7, lines 36-47).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable the steps of: communicating the current value of the MIB variable to the HTTP-SNMP interface; creating and storing an HTML page that contains the current value of

the MIB variable; and sending the HTML page to an HTML daemon of the network device in order to provide a management interface that is easily modified, enhanced, and customized for specific applications (column 4, lines 13-15, 22-29).

Regarding claim 15, Krishnamurthy et al. teach the network device, further comprising an HTTP-SNMP interface which, when executed by the processor, causes the processor to carry out the steps of: creating an SNMP query that requests a current value of the MIB variable based on the HTTP request message (column 7, lines 54-65; column 8, lines 62-67 – column 9, lines 1-8); and communicating the SNMP query to an SNMP daemon of the network device (column 7, lines 66-67 – column 8 lines 1-15; column 8, lines 62 – column 9, lines 1-54).

However, Krishnamurthy et al. fail to teach the step of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface.

Land et al. teach the network device further comprising an HTTP-SNMP interface which, when executed by the processor, causes the processor to carry out the step of: receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface (column 7, lines 5-60).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to employ the step of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface in order to provide a management interface that is easily modified, enhanced, and customized for specific applications (column 4, lines 13-15, 22-29).

Regarding claim 16, Krishnamurthy et al. fail to teach the network device, further comprising the steps of: communicating the current value of the MIB variable to the

HTTP-SNMP interface; creating and storing an HTML page that contains the current value of the MIB variable; and sending the HTML page to the HTML daemon.

Land et al. teach the network device, further comprising the steps of communicating the current value of the MIB variable to the HTTP-SNMP interface (column 7, lines 48-58); creating and storing an HTML page that contains the current value of the MIB variable (column 7, lines 59-67); and sending the HTML page to the HTML daemon (column 7, lines 36-47).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable to the steps of communicating the current value of the MIB variable to the HTTP-SNMP interface; creating and storing an HTML page that contains the current value of the MIB variable; and sending the HTML page to an HTML daemon of the network device in order to provide a management interface that is easily modified, enhanced, and customized for specific applications (column 4, lines 13-15, 22-29).

Regarding claim 21, Krishnamurthy et al. teach the computer-readable medium carrying one or more sequence of one or more instructions for obtaining a current value of a MIB variable stored in a network device in a network, wherein the instructions further cause the processor to carry out the steps of: creating an SNMP query that requests a current value of the MIB variable based on the HTTP request message (column 7, lines 54-65; column 8, lines 62-67 – column 9, lines 1-8); and communicating the SNMP query to an SNMP daemon of the network device (column 7, lines 66-67 – column 8 lines 1-15; column 8, lines 62 – column 9, lines 1-54).

However, Krishnamurthy et al. fail to teach the step of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface.

Land et al. teach the computer-readable medium carrying one or more sequence of one or more instructions for obtaining a current value of a MIB variable stored in a network device in a network, wherein the instructions further cause the processor to carry out the step of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface (column 7, lines 5-60).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable step of receiving the HTTP request message to obtain the current value of the MIB variable at an HTTP-SNMP interface in order to provide a management interface that is easily modified, enhanced, and customized for specific applications (column 4, lines 13-15, 22-29).

Regarding claim 22, Krishnamurthy et al. fail to teach the computer-readable medium, wherein the instructions further cause the processor to carry out the steps of: communicating the current value of the MIB variable to the HTTP-SNMP interface; creating and storing an HTML page that contains the current value of the MIB variable; and sending the HTML page to an HTML daemon of the network device.

Land et al. teach the computer-readable medium, wherein the instructions further cause the processor to carry out the steps of: communicating the current value of the MIB variable to the HTTP-SNMP interface (column 7, lines 48-58); creating and storing an HTML page that contains the current value of the MIB variable (column 7, lines 59-67); and sending the HTML page to an HTML daemon of the network device (column 7, lines 36-47).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable to the steps of communicating the current value of the MIB variable to the

HTTP-SNMP interface; creating and storing an HTML page that contains the current value of the MIB variable; and sending the HTML page to an HTML daemon of the network device in order to provide a management interface that is easily modified, enhanced, and customized for specific applications (column 4, lines 13-15, 22-29).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. USPN 5,926,463 issued to Ahearn et al. teaches a method and apparatus for viewing a configuration of a computer network by polling a plurality of switches and routers present in the network to obtain copies of information stored in the database.

2. USPN 6,272,537 issued to Kekic et al. teaches a method for building element manager for a computer network element using a visual element manager builder process, which includes the function of browsing MIB variables stored in a network device.

3. USPN 6,363,421 issued to Barker et al. teaches a method for remotely managing a plurality of network devices through the Internet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N Boutah whose telephone number is (703) 305-5104. The examiner can normally be reached on Monday-Friday (8:30 am-5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (703) 308-5221. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 746-9112 for regular communications and (703) 305-3718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

ANB
September 17, 2002

DAVID WILEY
PRIMARY EXAMINER